listening at a first device to a communication channel having one or more quiet time slots designated therein, the communication channel communicatively coupling the two or more current components of the computer network, the first device not initially admitted to the computer network, but capable of joining the computer network upon acceptance of a connection request transmitted from the first device to at least one of the network's current components; and

transmitting the connection request from the first device to a controller of the computer network within one of the designated quiet time slots.

2. The method of Claim 1, further comprising:

confirming the connection request by transmitting the connection request from the controller to the first device periodically until a response from the first device is received by the controller.

3. The method of Claim 2 further comprising:

sending from the controller to the first device, a connection agreements package, the package including information regarding time slots within the communication channel to be used by the controller when transmitting information to the first network device.

4. The method of Claim 3 wherein the connection agreement packet further includes information regarding non-quiet time slots within the communication channel to be used by the first device when transmitting information to the controller.

5. The method of Claim 4 wherein information sent between the first device and the controller comprises packets and the connection agreement packet further includes information the first network device can send or expect to receive in each packet for each type of data included in a packet.

6. The method of Claim 4 further comprising:

transmitting data from the first device to the controller in the non-quiet time slots designated in the connection agreement packet.

7. A method of seeking admission to a computer network having two or more current components, the method comprising:

determining at a first device not initially admitted to the computer network, but capable of joining the computer network, whether a communication channel communicatively coupling the two or more current components of the computer network is actively being utilized by the current components of the computer network;

determining at the first device the existence of one or more quiet time slots designated within the communications channel; and

transmitting a message from the first device, within one or more of the quiet time slots designated within the communication channel, at a time depending upon whether the communication channel is actively being utilized or not.

8. The method of Claim 7 wherein if the communication channel is not actively being utilized, the first device listens to the communication channel for a response to the message before changing to a new communication channel.

9. The method of Claim 8 further comprising:

listening for channel activity in the new communication channel.

10. The method of Claim 9 further comprising negotiating for access to the new communication channel if channel activity is detected, otherwise transmitting a connection request message in the new communication channel and awaiting a response thereto.

11. The method of claim 10 further comprising:

repeatedly changing channels and, in each channel, listening for channel activity and either negotiating for channel access or transmitting the connection request message, depending upon whether channel activity is detected, for all available channels until an active channel is found or all available channels have been searched.

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12. A method of seeking admission to a computer network having two or more current components, at least one component being a network controller, the method comprising:

listening at the network controller for a connection request message transmitted in a quiet time slot by a first device not initially admitted to the computer network, but capable of joining the computer network, the connection request message seeking access

for the first device to a communication channel communicatively coupling the network's two or more current components; and

negotiating bandwidth requirements within the communication channel with the first device upon receipt of the connection request message.

13. The method of claim 12 wherein negotiating comprises exchanging further connection request messages between the network controller and the first device to synchronize the first device to the network controller.

14. The method of claim 12 further comprising:

authenticating the first device by comparing a client identifier provided by the first device against a list of known clients prior to negotiating bandwidth requirements.

15. The method of claim 12 wherein negotiating bandwidth requirements comprises reallocating bandwidth within the communication channel among the one or more network components and the first device.

16 (Cancelled)

17 (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. The method of claim 3 wherein the connection agreement packet comprises a connection agreement command field that identifies the packet, a forward bandwidth field to specify the number of packets that the first device can expect to receive from the controller, a reverse bandwidth field to specify the number of packets that the first device may send to the controller, a field that specifies a preceding on-line network device and a network on-line number.

22. The method of claim 1 wherein the connection request identifies a subclient of the first device.

23. The method of claim 22 wherein the connection request is first transmitted from the subclient to the first device across a wireless communication link before being transmitted from the first device to the controller.

24. The method of claim 23 wherein the controller authenticates the subclient prior to allowing the subclient to access the computer network.

25. The method of claim 24 wherein the controller further determines whether sufficient bandwidth is available in the communication channel to accommodate the subclient prior to allowing the subclient to access the computer network.

26. The method of claim 25 wherein the controller communicates the result of its decision whether or not to allow the subclient to access the computer network to the subclient via the first device.

27. A method of providing access to a computer network, comprising:

organizing communications within a computer network communication channel into a number of time slots, each time slot being designated for transmissions from one of a number of network components; and

including a quiet time slot within the communication channel for use by a first device seeking access to the communication channel, the first device not initially admitted to the network, but capable of joining the computer network.

28. The method of claim 27 further comprising:

transmitting from the first device a request for access to the communication channel during the quiet time slot.

29. The method of claim 28 wherein the request for access is repeated a number of times during the period of the quiet time slot.

30. The method of claim 29 further comprising transmitting a response to the request for access from the first device if no other requests for access were received from other non-admitted devices at the same time as the request for access transmitted by the first device, otherwise not transmitting a response.

31. The method of claim 30 wherein if the first device does not receive a response to the request for access, the first device refrains from transmitting a further request for access to the communication channel for an arbitrary period of time.

32. The method of claim 31 further comprising transmitting the further request for access from the first new network component and granting access to the communication channel to the first new network component in response thereto.

33. The method of claim 28 further comprising recognizing at a second non-admitted device the request for access transmitted by the first device.

34. The method of claim 33 wherein the second non-admitted device refrains from transmitting a new request for access to the communication channel in response to recognizing the request for access transmitted by the first device.